AMENDMENTS TO THE CLAIMS:

Please amend claim 30 as indicated below. This listing of claims will replace all prior versions and listings of claims in the application. Deletions appear in strikethroughfort or [[inside double brackets]], and additions are underlined.

Complete listing of claims

1. (Previously Presented) A pyridazin-3(2H)-one derivative compound of formula (I):

wherein

R¹ and R² represent independently from each other:

- a hydrogen atom;
- a group chosen from acyl, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, monoalkylcarbamoyl and dialkylcarbamoyl;
- an alkyl, alkenyl or alkynyl group, wherein said alkyl, alkenyl or alkynyl group is
 optionally substituted by one or more substituents chosen from halogen atoms,
 hydroxy, alkoxy, aryloxy, alkylthio, oxo, amino, mono- and di-alkylamino, acylamino,
 carbamoyl and mono- and di-alkylcarbamoyl groups;
- an aryl or heteroaryl group, wherein said aryl or heteroaryl group is optionally substituted by one or more substituents chosen from halogen atoms, hydroxy, hydroxyalkyl, hydroxycarbonyl, alkoxy, alkylenedioxy, alkoxyacyl, aryloxy, acyl, acyloxy, alkylthio, amino, nitro, cyano, mono- and di-alkylamino, acylamino,

carbamoyl, mono- and di-alkylcarbamoyl, difluoromethyl, trifluoromethyl, difluoromethoxy and trifluoromethoxy groups;

- a saturated or unsaturated heterocyclic group, which is optionally substituted by one
 or more substituents chosen from halogen atoms, hydroxy, hydroxyalkyl,
 hydroxycarbonyl, alkoxy, alkylenedioxy, alkoxyacyl, aryloxy, acyl, acyloxy, alkylthio,
 oxo, amino, nitro, cyano, mono- and di-alkylamino, acylamino, carbamoyl, monoand di-alkylcarbamoyl, difluoromethyl, trifluoromethyl, difluoromethoxy and
 trifluoromethoxy groups;
- a group of formula

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wherein n is an integer from 0 to 4 and R⁶ represents:

- a cycloalkyl or cycloalkenyl group;
- an aryl group, which is optionally substituted by one or more substituents
 chosen from halogen atoms, alkyl, hydroxy, alkoxy, alkylenedioxy, alkylthio,
 amino, mono- and di-alkylamino, nitro, acyl, hydroxycarbonyl, alkoxycarbonyl,
 carbamoyl, mono- and di-alkylcarbamoyl, cyano, trifluoromethyl,
 difluoromethoxy and trifluoromethoxy groups;
- or a 3- to 7-membered ring having from 1 to 4 heteroatoms chosen from nitrogen, oxygen and sulphur, which ring is optionally substituted by one or more substituents chosen from halogen atoms, alkyl, hydroxy, alkoxy, alkylenedioxy, amino, mono- and di-alkylamino, nitro, cyano and trifluoromethyl groups;

R³ represents a monocyclic or polycyclic aryl or heteroaryl group, which is optionally substituted by one or more substituents chosen from:

- halogen atoms;
- alkyl and alkylene groups, which are optionally substituted by one or more substituents chosen from halogen atoms; phenyl, hydroxy, hydroxyalkyl, alkoxy, aryloxy, alkylthio, oxo, amino, mono- and di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, and mono- and di-alkylcarbamoyl groups;
- phenyl, hydroxy, hydroxyalkyl, alkoxy, cycloalkoxy, nitro, aryloxy, alkylthio,
 alkylsulphinyl, alkylsulphonyl, alkylsulfamoyl, acyl, amino, mono- and dialkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and
 di-alkylcarbamoyl, ureido, N'-alkylureido, N',N'-dialkylureido, alkylsulphamido,
 aminosuphonyl, mono- and di-alkylaminosulphonyl, cyano, difluoromethoxy and
 trifluoromethoxy groups;

R⁵ represents a group –COOR⁷ or a monocyclic or polycyclic aryl or heteroaryl group, wherein said –COOR⁷ or monocyclic or polycyclic aryl or heteroaryl group is optionally substituted by one or more substituents chosen from:

- halogen atoms;
- alkyl and alkenyl groups, which are optionally substituted by one or more substituents chosen from halogen atoms, phenyl, hydroxy, hydroxyalkyl, alkoxy, aryloxy, alkylthio, oxo, amino, mono- and di-alkylamino, acylamino,

hydroxycarbonyl, alkoxycarbonyl, carbamoyl, and mono- and di-alkylcarbamoyl groups; and

phenyl, hydroxy, alkylenedioxy, alkoxy, cycloalkyloxy, alkylthio, alkylsulphinyl, alkylsulphonyl, alkylsulfamoyl, amino, mono- and di-alkylamino, acylamino, nitro, acyl, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and di-alkylcarbamoyl, ureido, N'-alkylureido, N',N'-dialkylureido, alkylsulphamido, aminosuphonyl, mono- and di-alkylaminosulphonyl, cyano, difluoromethoxy and trifluoromethoxy groups;

wherein R⁷ represents an alkyl, which is optionally substituted by one or more substituents chosen from halogen atoms, hydroxy, alkoxy, aryloxy, alkylthio, oxo, amino, mono- and di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and di-alkylcarbamoyl groups, and a group of formula

$$-(CH_2)_n-R^6$$

wherein n and R⁶ are as defined above; and

R⁴ represents:

- a hydrogen atom;
- a hydroxy, alkoxy, amino, mono- or di-alkylamino group;
- an alkyl, alkenyl or alkynyl group, wherein said alkyl, alkenyl or alkynyl group is
 optionally substituted by one or more substituents chosen from halogen atoms,
 hydroxy, alkoxy, aryloxy, alkylthio, oxo, amino, mono- and di-alkylamino,

acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl and mono- and dialkylcarbamoyl groups;

• or a group of formula

wherein n and R⁶ are as defined above

or a N-oxide obtainable from heteroaryl radicals present in the structure when said heteroradical comprise at least one N atom or a pharmaceutically acceptable salt thereof;

with the proviso that when R⁵ is neither an optionally substituted heteroaryl group nor a group COOR⁷, R³ is an optionally substituted heteroaryl group.

- 2. (Previously Presented) A compound according to claim 1 wherein R² represents a hydrogen atom or an aryl group, which is optionally substituted by one or more substituents chosen from halogen atoms, nitro, C₁-C₄ alkoxy, C₁-C₄ hydroxyalkyl and CO₂-(C₁-C₄ alkyl) groups.
- 3. (Previously Presented) A compound according to claim 2, wherein R² is a hydrogen atom or a phenyl group, which is unsubstituted or substituted with 1 or 2 unsubstituted

substituents chosen from fluorine atoms, chlorine atoms, and nitro, C_1 - C_4 hydroxyalkyl and - CO_2 - $(C_1$ - C_2 alkyl) groups.

- 4. (Previously Presented) A compound according to claim 1, wherein R¹ represents a group chosen from:
 - a (C₁₋C₄) alkyl group, which is optionally substituted by one or more hydroxy groups; and
 - groups of formula

wherein n is an integer from 1 to 3 and R^6 represents a $(C_3 - C_6)$ cycloalkyl group.

- 5. (Original) A compound according to claim 4, wherein R¹ is an unsubstituted C₁-C₄ alkyl, an unsubstituted C₁-C₄ hydroxyalkyl or an unsubstituted cyclopropyl-(C₁-C₄ alkyl)- group.
- 6. (Previously Presented) A compound according to claim 1, wherein R³ represents a monocyclic or polycyclic aryl or heteroaryl group, wherein said monocyclic or polycyclic aryl or heteroaryl group is optionally substituted by one or more substituents chosen from:
 - halogen atoms;
 - alkyl and alkylene groups, wherein said alkyl and alkylene groups are optionally substituted by one or more substituents chosen from halogen atoms;

- phenyl, hydroxy, hydroxycarbonyl, hydroxyalkyl, alkoxycarbonyl, alkoxy, cycloalkoxy, nitro, aryloxy, alkylthio, alkylsulphinyl, alkylsulphonyl, alkylsulfamoyl, acyl, amino, mono- or di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and di-alkylcarbamoyl, ureido, N'-alkylureido, N',N'-dialkylureido, alkylsulphamido, aminosuphonyl, mono- and di-alkylaminosulphonyl, cyano, difluoromethoxy and trifluoromethoxy groups;
- 7. (Previously Presented) A compound according to claim 6, wherein R³ represents a group chosen from monocyclic or polycyclic aryl or heteroaryl groups, wherein said monocyclic or polycyclic aryl or heteroaryl groups are optionally substituted by one or more substituents chosen from:
 - halogen atoms;

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- (C₁.C₄) alkyl groups, which are optionally substituted by one or more hydroxy groups;
- and (C₁₋C₄) alkoxy, nitro, hydroxy, hydroxycarbonyl, carbamoyl, (C₁₋C₄
 alkoxy)-carbonyl and cyano groups.
- 8. (Previously Presented) A compound according to claim 7, wherein R³ represents a phenyl group, a naphthyl group or a 5- to 14-membered monocylic or polycyclic heteroaryl group containing 1, 2 or 3 heteroatoms chosen from N, O and S, the phenyl, naphthyl and heteroaryl groups being unsubstituted or substituted with 1 or 2 unsubstituted substituents chosen from:
 - halogen atoms;

- C₁-C₄ alkyl and C₁-C₄ hydroxyalkyl groups; and
- C₁-C₄ alkoxy, nitro, hydroxy, hydroxycarbonyl, carbamoyl, (C₁-C₄ alkoxy)-carbonyl and cyano groups.
- 9. (Previously Presented) A compound according to claim 8 wherein R³ represents a phenyl group, a naphtyl group or a substituted or unsubtituted heteroaryl group chosen from substituted or unsubstituted oxadiazolyl, oxazolyl, pyridyl, pyrrolyl, imidazolyl, thiazolyl, thiadiazolyl, thienyl, furanyl, quinolinyl, isoquinolinyl, indolyl, benzoxazolyl, naphthyridinyl, benzofuranyl, pyrazinyl, pyrimidinyl and pyrrolopyridyl radicals.
- 10. (Previously Presented) A compound according to claim 1, wherein R⁴ represents:
 - an unsubstituted mono-(C₁-C₄ alkyl)amino or unsubstituted di-(C₁-C₄ alkyl)amino group;
 - a C₁-C₄ alkyl group which is unsubstituted or substituted by one or more substituents chosen from hydroxy, C₁-C₄ alkoxy, amino, mono-(C₁-C₄ alkyl)amino and di-(C₁-C₄ alkyl)amino groups;
 - an unsubstituted phenyl-(C₁-C₄ alkyl)- group; or
 - a group of formula

-(CH₂)_n-R⁶

wherein n is 2 and R⁶ represents a radical chosen from phenyl, pyridyl and thienyl, optionally substituted by one or more substituents chosen from halogen atoms, alkyl,

hydroxy, alkoxy, alkylenedioxy, amino, mono- and di-alkylamino, nitro, ciano and trifluoromethyl groups.

- 11. (Previously Presented) A compound according to claim 10 wherein R⁴ represents an alkyl group having from 1 to 6 carbon atoms and which is optionally substituted by one or more substituents chosen from halogen atoms and hydroxy groups.
- 12. (Previously Presented) A compound according to claim 1, wherein R^5 represents a group $COOR^7$ or a monocyclic or polycyclic aryl or heteroaryl group, wherein said $COOR^7$ or monocyclic or polycyclic aryl or heteroaryl group is optionally substituted by one or more substituents chosen from halogen atoms, C_1 - C_4 alkyl groups, C_1 - C_4 alkoxycarbonyl groups, hydroxycarbonyl groups and C_1 - C_4 alkoxy groups.
- 13. (Previously Presented) A compound according to claim 12, wherein R⁵ represents a group COOR⁷ or a monocyclic or polycyclic aryl or heteroaryl group, wherein said COOR⁷ or a monocyclic or polycyclic aryl or heteroaryl group is optionally substituted by one or more substituents chosen from halogen atoms and C₁-C₄ alkoxy groups.
- 14. (Previously Presented) A compound according to claim 12, wherein R⁵ represents –CO₂R⁷, wherein R⁷ represents an unsubstituted C₁-C₄ alkyl group, or R⁵ represents a phenyl group or a 5- to 10- membered monocyclic or polycyclic heteroaryl group containing 1 or 2 heteroatoms chosen from N, O and S, the phenyl and heteroaryl

groups being unsubstituted or substituted by 1 or 2 substituents chosen from C₁-C₄ alkoxy groups and halogen atoms.

- 15. (Previously Presented) A compound according to claim 14, wherein R⁵ represents a phenyl group, or a substituted or unsubtituted heteroaryl group chosen from substituted or unsubstituted oxadiazolyl, oxazolyl, pyridyl, pyrrolyl, imidazolyl, thiazolyl, thiadiazolyl, thienyl, furanyl, quinolinyl, isoquinolinyl, indolyl, benzoxazolyl, naphthyridinyl, benzofuranyl, pyrazinyl, pyrimidinyl and pyrrolopyridyl radicals.
- 16. (Previously Presented) A pyridazin-3(2H)-one derivative compound of formula (I):

wherein

R¹ and R² represent independently from each other:

- a hydrogen atom;
- a group chosen from acyl, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, monoalkylcarbamoyl and dialkylcarbamoyl;
- an alkyl, alkenyl or alkynyl group, wherein said alkyl, alkenyl or alkynyl group is
 optionally substituted by one or more substituents chosen from halogen atoms,

hydroxy, alkoxy, aryloxy, alkylthio, oxo, amino, mono- and di-alkylamino, acylamino, carbamoyl and mono- and di-alkylcarbamoyl groups;

- an aryl or heteroaryl group, wherein said aryl or heteroaryl group is optionally substituted by one or more substituents chosen from halogen atoms, hydroxy, hydroxyalkyl, hydroxycarbonyl, alkoxy, alkylenedioxy, alkoxyacyl, aryloxy, acyl, acyloxy, alkylthio, amino, nitro, cyano, mono- and di-alkylamino, acylamino, carbamoyl, mono- and di-alkylcarbamoyl, difluoromethyl, trifluoromethyl, difluoromethoxy and trifluoromethoxy groups;
- a saturated or unsaturated heterocyclic group, which is optionally substituted by one
 or more substituents chosen from halogen atoms, hydroxy, hydroxyalkyl,
 hydroxycarbonyl, alkoxy, alkylenedioxy, alkoxyacyl, aryloxy, acyl, acyloxy, alkylthio,
 oxo, amino, nitro, cyano, mono- and di-alkylamino, acylamino, carbamoyl, monoand di-alkylcarbamoyl, difluoromethyl, trifluoromethyl, difluoromethoxy and
 trifluoromethoxy groups;
- a group of formula

wherein n is an integer from 0 to 4 and R⁶ represents:

- a cycloalkyl or cycloalkenyl group;
- an aryl group, which is optionally substituted by one or more substituents
 chosen from halogen atoms, alkyl, hydroxy, alkoxy, alkylenedioxy, alkylthio,
 amino, mono- and di-alkylamino, nitro, acyl, hydroxycarbonyl, alkoxycarbonyl,
 carbamoyl, mono- and di-alkylcarbamoyl, cyano, trifluoromethyl,
 difluoromethoxy and trifluoromethoxy groups;

 or a 3- to 7-membered ring having from 1 to 4 heteroatoms chosen from nitrogen, oxygen and sulphur, which ring is optionally substituted by one or more substituents chosen from halogen atoms, alkyl, hydroxy, alkoxy, alkylenedioxy, amino, mono- and di-alkylamino, nitro, cyano and trifluoromethyl groups;

R³ represents a monocyclic or polycyclic aryl or heteroaryl group, which is optionally substituted by one or more substituents chosen from:

- halogen atoms;
- alkyl and alkylene groups, which are optionally substituted by one or more substituents chosen from halogen atoms; phenyl, hydroxy, hydroxyalkyl, alkoxy, aryloxy, alkylthio, oxo, amino, mono- and di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, and mono- and di-alkylcarbamoyl groups;
- phenyl, hydroxy, hydroxyalkyl, alkoxy, cycloalkoxy, nitro, aryloxy, alkylthio,
 alkylsulphinyl, alkylsulphonyl, alkylsulfamoyl, acyl, amino, mono- and dialkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and
 di-alkylcarbamoyl, ureido, N'-alkylureido, N',N'-dialkylureido, alkylsulphamido,
 aminosuphonyl, mono- and di-alkylaminosulphonyl, cyano, difluoromethoxy and
 trifluoromethoxy groups;

R⁵ represents a group –COOR⁷ or a monocyclic or polycyclic aryl or heteroaryl group, wherein said –COOR⁷ or monocyclic or polycyclic aryl or heteroaryl group is optionally substituted by one or more substituents chosen from:

halogen atoms;

- alkyl and alkenyl groups, which are optionally substituted by one or more substituents chosen from halogen atoms, phenyl, hydroxy, hydroxyalkyl, alkoxy, aryloxy, alkylthio, oxo, amino, mono- and di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, and mono- and di-alkylcarbamoyl groups; and
- phenyl, hydroxy, alkylenedioxy, alkoxy, cycloalkyloxy, alkylthio, alkylsulphinyl,
 alkylsulphonyl, alkylsulfamoyl, amino, mono- and di-alkylamino, acylamino, nitro,
 acyl, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and di-alkylcarbamoyl,
 ureido, N'-alkylureido, N',N'-dialkylureido, alkylsulphamido, aminosuphonyl,
 mono- and di-alkylaminosulphonyl, cyano, difluoromethoxy and trifluoromethoxy
 groups;

R⁷ represents an alkyl, which is optionally substituted by one or more substituents chosen from halogen atoms, hydroxy, alkoxy, aryloxy, alkylthio, oxo, amino, monoand di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, monoand di-alkylcarbamoyl groups, and a group of formula

 $-(CH_2)_n-R^6$

wherein n and R⁶ are as defined above; and

R⁴ represents:

a hydrogen atom;

a hydroxy, alkoxy, amino, mono- or di-alkylamino group;

an alkyl, alkenyl or alkynyl group, wherein said alkyl, alkenyl or alkynyl group is

optionally substituted by one or more substituents chosen from halogen atoms,

hydroxy, alkoxy, aryloxy, alkylthio, oxo, amino, mono- and di-alkylamino,

acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl and mono- and di-

alkylcarbamoyl groups;

• or a group of formula

 $-(CH_2)_n-R^6$

wherein n and R⁶ are as defined above

or a N-oxide obtainable from heteroaryl radicals present in the structure when said

heteroradical comprise at least one N atom or a pharmaceutically acceptable salt

thereof

with the proviso that when R⁵ is neither an optionally substituted heteroaryl group nor a

group COOR⁷, R³ is an optionally substituted heteroaryl group;

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wherein when R⁵ represents a polycyclic heteroaryl group, R⁵ represents a group of formula (XXIII):

$$(R)_n$$
 $(XXIII)$

wherein Y represents an O atom, a S atom or an -NH- group, n is 0, 1 or 2 and each R is the same or different and is a C_1 - C_4 alkoxy group or a halogen atom.

17. (Previously Presented) A compound as claimed in claim 1, chosen from :

5-acetyl-2-ethyl-4-[(3-fluorophenyl)amino]-6-pyridin-3-ylpyridazin-3(2H)-one;
5-acetyl-4-[(3-chlorophenyl)amino]-2-ethyl-6-pyridin-3-ylpyridazin-3(2H)-one;
5-acetyl-4-[(3,5-dichlorophenyl)amino]-2-ethyl-6-pyridin-3-ylpyridazin-3(2H)-one;
5-acetyl-2-ethyl-4-(1-naphthylamino)-6-pyridin-3-ylpyridazin-3(2H)-one;
methyl 4-[(5-acetyl-2-ethyl-3-oxo-6-pyridin-3-yl-2,3-dihydropyridazin-4-yl)amino]benzoate;

5-acetyl-2-ethyl-4-[(2-fluorophenyl)amino]-6-pyridin-3-ylpyridazin-3(2H)-one; 5-acetyl-4-[(2-chlorophenyl)amino]-2-ethyl-6-pyridin-3-ylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-{[4-(hydroxymethyl)phenyl]amino}-6-pyridin-3-ylpyridazin-3(2H)-one;

3-[(5-acetyl-2-ethyl-3-oxo-6-pyridin-3-yl-2,3-dihydropyridazin-4-yl)amino]benzonitrile; 5-acetyl-4-[(3-chlorophenyl)amino]-2-(cyclopropylmethyl)-6-pyridin-3-ylpyridazin-3(2H)-one;

5-acetyl-2-(cyclopropylmethyl)-4-[(3,5-dichlorophenyl)amino]-6-pyridin-3-ylpyridazin-3(2H)-one;

5-acetyl-2-(cyclopropylmethyl)-4-[(2-fluorophenyl)amino]-6-pyridin-3-ylpyridazin-3(2H)-one;

5-acetyl-4-[(2-chlorophenyl)amino]-2-(cyclopropylmethyl)-6-pyridin-3-ylpyridazin-3(2H)-one;

3-{[5-acetyl-2-(cyclopropylmethyl)-3-oxo-6-pyridin-3-yl-2,3-dihydropyridazin-4-yl]amino}benzonitrile;

methyl 4-{[5-acetyl-2-(2-hydroxyethyl)-3-oxo-6-pyridin-3-yl-2,3-dihydropyridazin-4-yl]amino}benzoate;

5-acetyl-4-[(2-fluorophenyl)amino]-2-(2-hydroxyethyl)-6-pyridin-3-ylpyridazin-3(2H)-one;

5-acetyl-4-[(2-chlorophenyl)amino]-2-(2-hydroxyethyl)-6-pyridin-3-ylpyridazin-3(2H)-one;

5-acetyl-4-[(3-chlorophenyl)amino]-2-(2-hydroxyethyl)-6-pyridin-3-ylpyridazin-3(2H)-one;

5-acetyl-4-[(3-chlorophenyl)amino]-2-ethyl-6-pyridin-2-ylpyridazin-3(2H)-one;
3-[(5-acetyl-2-ethyl-3-oxo-6-pyridin-2-yl-2,3-dihydropyridazin-4-yl)amino]benzonitrile;
5-acetyl-2-ethyl-4-{[4-(hydroxymethyl)phenyl]amino}-6-pyridin-2-ylpyridazin-3(2H)-one;

3-{[5-acetyl-2-(cyclopropylmethyl)-3-oxo-6-pyridin-2-yl-2,3-dihydropyridazin-4-yl]amino}benzonitrile;

5-acetyl-4-[(3-chlorophenyl)amino]-2-(cyclopropylmethyl)-6-pyridin-2-ylpyridazin-3(2H)-one;

5-acetyl-2-(cyclopropylmethyl)-4-{[4-(hydroxymethyl)phenyl]amino}-6-pyridin-2-ylpyridazin-3(2H)-one;

5-acetyl-2-(cyclopropylmethyl)-4-[(3,5-dichlorophenyl)amino]-6-pyridin-2-ylpyridazin-3(2H)-one;

3-{[5-acetyl-2-(2-hydroxyethyl)-3-oxo-6-pyridin-2-yl-2,3-dihydropyridazin-4-yl]amino}benzonitrile;

5-acetyl-4-[(3-chlorophenyl)amino]-2-(2-hydroxyethyl)-6-pyridin-2-ylpyridazin-3(2H)-one;

5-acetyl-4-[(3,5-dichlorophenyl)amino]-2-(2-hydroxyethyl)-6-pyridin-2-ylpyridazin-3(2H)-one;

5-acetyl-2-(2-hydroxyethyl)-4-{[4-(hydroxymethyl)phenyl]amino}-6-pyridin-2-ylpyridazin-3(2H)-one;

5-acetyl-2-ethyl-4-[(3-fluorophenyl)amino]-6-pyridin-4-ylpyridazin-3(2H)-one; 5-acetyl-4-[(3-chlorophenyl)amino]-2-ethyl-6-pyridin-4-ylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-(1-naphthylamino)-6-pyridin-4-ylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-[(2-methylphenyl)amino]-6-pyridin-4-ylpyridazin-3(2H)-one;

methyl 4-[(5-acetyl-2-ethyl-3-oxo-6-pyridin-4-yl-2,3-dihydropyridazin-4-

yl)amino]benzoate;

5-acetyl-2-ethyl-4-[(2-methoxyphenyl)amino]-6-pyridin-4-ylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-[(3-methoxyphenyl)amino]-6-pyridin-4-ylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-[(2-fluorophenyl)amino]-6-pyridin-4-ylpyridazin-3(2H)-one;

5-acetyl-4-[(2-chlorophenyl)amino]-2-ethyl-6-pyridin-4-ylpyridazin-3(2H)-one;

3-[(5-acetyl-2-ethyl-3-oxo-6-pyridin-4-yl-2,3-dihydropyridazin-4-yl)amino]benzonitrile;

5-acetyl-2-ethyl-4-{[4-(hydroxymethyl)phenyl]amino}-6-pyridin-4-ylpyridazin-3(2H)-

one;

4-[(5-acetyl-2-ethyl-3-oxo-6-pyridin-4-yl-2,3-dihydropyridazin-4-yl)amino]benzoic

acid;

5-acetyl-2-(cyclopropylmethyl)-4-[(2-fluorophenyl)amino]-6-pyridin-4-ylpyridazin-

3(2H)-one;

5-acetyl-4-[(2-chlorophenyl)amino]-2-(cyclopropylmethyl)-6-pyridin-4-ylpyridazin-

3(2H)-one;

3-{[5-acetyl-2-(cyclopropylmethyl)-3-oxo-6-pyridin-4-yl-2,3-dihydropyridazin-4-

yl]amino}benzonitrile;

5-acetyl-2-(cyclopropylmethyl)-4-{[4-(hydroxymethyl)phenyl]amino}-6-pyridin-4-

ylpyridazin-3(2H)-one;

5-acetyl-4-[(3-chlorophenyl)amino]-2-(cyclopropylmethyl)-6-pyridin-4-ylpyridazin-

3(2H)-one;

5-acetyl-4-[(2-fluorophenyl)amino]-2-(2-hydroxyethyl)-6-pyridin-4-ylpyridazin-3(2H)-

one;

5-acetyl-4-[(2-chlorophenyl)amino]-2-(2-hydroxyethyl)-6-pyridin-4-ylpyridazin-3(2H)-

one;

3-{[5-acetyl-2-(2-hydroxyethyl)-3-oxo-6-pyridin-4-yl-2,3-dihydropyridazin-4-

yl]amino}benzonitrile;

5-acetyl-2-(2-hydroxyethyl)-4-{[4-(hydroxymethyl)phenyl]amino}-6-pyridin-4-ylpyridazin-3(2H)-one;

5-acetyl-4-[(3-chlorophenyl)amino]-2-(2-hydroxyethyl)-6-pyridin-4-ylpyridazin-3(2H)-one;

5-acetyl-4-[(3-chlorophenyl)amino]-2-ethyl-6-thien-2-ylpyridazin-3(2H)-one;

5-acetyl-4-[bis(3-fluorophenyl)amino]-2-ethyl-6-pyridin-3-ylpyridazin-3(2H)-one;

5-acetyl-4-[bis-(4-methoxycarbonylphenyl)-amino]-2-ethyl-6-pyridin-3-ylpyridazin-3(2H)-one;

5-acetyl-4-{bis[4-(hydroxymethyl)phenyl]amino}-2-ethyl-6-pyridin-3-ylpyridazin-3(2H)-one;

5-acetyl-4-[bis(3-nitrophenyl)amino]-2-ethyl-6-pyridin-4-ylpyridazin-3(2H)-one;

5-acetyl-4-[bis(3-fluorophenyl)amino]-2-ethyl-6-pyridin-4-ylpyridazin-3(2H)-one;

5-acetyl-4-[bis(3-chlorophenyl)amino]-2-(cyclopropylmethyl)-6-pyridin-3-ylpyridazin-3(2H)-one;

5-acetyl-4-[bis(3,5-dichlorophenyl)amino]-2-(cyclopropylmethyl)-6-pyridin-3-ylpyridazin-3(2H)-one;

5-acetyl-4-[bis(4-methoxycarbonylphenyl)amino]-2-(2-hydroxyethyl)-6- pyridin-3-ylpyridazin-3(2H)-one;

5-acetyl-4-[bis(3-chlorophenyl)amino]-2-(2-hydroxyethyl)-6-pyridin-2-ylpyridazin-3(2H)-one;

5-acetyl-4-[bis(3-chlorophenyl)amino]-2-(cyclopropylmethyl)-6-pyridin-4-ylpyridazin-3(2H)-one;

5-acetyl-2-ethyl-6-phenyl-4-(pyridin-3-ylamino)pyridazin-3(2H)-one;

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5-acetyl-4-[(3,5-dichloropyridin-4-yl)amino]-2-ethyl-6-phenylpyridazin-3(2H)-one;
5-acetyl-2-ethyl-6-phenyl-4-(pyrazin-2-ylamino)pyridazin-3(2H)-one;
5-acetyl-2-ethyl-6-phenyl-4-(pyrimidin-2-ylamino)pyridazin-3(2H)-one;
5-acetyl-2-ethyl-6-phenyl-4-(quinolin-8-ylamino)pyridazin-3(2H)-one;
5-acetyl-2-ethyl-4-[(5-nitropyridin-2-yl)amino]-6-phenylpyridazin-3(2H)-one;
5-acetyl-2-ethyl-4-(1h-indol-4-ylamino)-6-phenylpyridazin-3(2H)-one;
5-acetyl-4-(1,3-benzothiazol-6-ylamino)-2-ethyl-6-phenylpyridazin-3(2H)-one;
5-acetyl-2-ethyl-6-phenyl-4-(thianthren-1-ylamino)pyridazin-3(2H)-one;
methyl 3-[(5-acetyl-2-ethyl-3-oxo-6-phenyl-2,3-dihydropyridazin-4-
yl)amino]thiophene-2-carboxylate;
5-acetyl-2-ethyl-4-[(4-methylpyridin-2-yl)amino]-6-phenylpyridazin-3(2H)-one;
5-acetyl-2-ethyl-6-phenyl-4-(1h-1,2,4-triazol-5-ylamino)pyridazin-3(2H)-one;
5-acetyl-2-ethyl-4-[(6-methoxypyridin-3-yl)amino]-6-phenylpyridazin-3(2H)-one;
5-acetyl-2-ethyl-4-(2H-indazol-5-ylamino)-6-phenylpyridazin-3(2H)-one;
methyl 4-[(5-acetyl-2-ethyl-3-oxo-6-phenyl-2,3-dihydropyridazin-4-
vI)amino]thiophene-3-carboxylate;
5-acetyl-2-ethyl-6-phenyl-4-(pyridin-2-ylamino)pyridazin-3(2H)-one;
3-[(5-acetyl-2-ethyl-3-oxo-6-phenyl-2,3-dihydropyridazin-4-yl)amino]thiophene-2-
carboxylic acid;
5-acetyl-2-ethyl-4-[(3-methylcinnolin-5-yl)amino]-6-phenylpyridazin-3(2H)-one;
5-acetyl-2-ethyl-4-[(2-methylquinolin-8-yl)amino]-6-phenylpyridazin-3(2H)-one;
5-acetyl-2-ethyl-6-phenyl-4-(quinolin-5-ylamino)pyridazin-3(2H)-one;
5-acetyl-2-ethyl-4-(1h-indol-5-ylamino)-6-phenylpyridazin-3(2H)-one;
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5-acetyl-2-ethyl-4-(isoquinolin-5-ylamino)-6-phenylpyridazin-3(2H)-one;
5-acetyl-2-ethyl-4-[(6-methoxyquinolin-8-yl)amino]-6-phenylpyridazin-3(2H)-one;
5-acetyl-4-[(5-bromoquinolin-8-yl)amino]-2-ethyl-6-phenylpyridazin-3(2H)-one;
5-acetyl-2-ethyl-4-[(4-methylpyrimidin-2-yl)amino]-6-phenylpyridazin-3(2H)-one;
5-acetyl-6-(3-chlorophenyl)-2-ethyl-4-(pyridin-3-ylamino)pyridazin-3(2H)-one;
5-acetyl-6-(3-chlorophenyl)-2-(cyclopropylmethyl)-4-(pyridin-3-ylamino)pyridazin-3(2H)-one;

5-acetyl-2-ethyl-6-(3-fluorophenyl)-4-(pyridin-3-ylamino)pyridazin-3(2H)-one; 5-acetyl-6-(3-fluorophenyl)-2-isopropyl-4-(pyridin-3-ylamino)pyridazin-3(2H)-one; 5-acetyl-2-(cyclopropylmethyl)-6-(3-fluorophenyl)-4-(pyridin-3-ylamino)pyridazin-3(2H)-one;

5-acetyl-2-ethyl-6-(4-fluorophenyl)-4-(pyridin-3-ylamino)pyridazin-3(2H)-one; 5-acetyl-6-(1h-benzimidazol-2-yl)-4-[(3-chlorophenyl)amino]-2-ethylpyridazin-3(2H)-one;

5-acetyl-6-(1,3-benzoxazol-2-yl)-4-[(3-chlorophenyl)amino]-2-ethylpyridazin-3(2H)-one;

5-acetyl-6-(1,3-benzoxazol-2-yl)-2-ethyl-4-[(3-fluorophenyl)amino]pyridazin-3(2H)-one;

5-acetyl-6-benzooxazol-2-yl-4-[bis-(3-chlorophenyl)-amino]-2-ethyl-pyridazin-3(2H)-one;

5-acetyl-6-benzooxazol-2-yl-4-[bis-(3-fluorophenyl)-amino]-2-ethyl-pyridazin-3(2H)-one;

3-[(5-acetyl-2-ethyl-3-oxo-6-pyridin-3-yl-2,3-dihydropyridazin-4-yl)amino]benzamide;

5-acetyl-2-ethyl-4-(isoquinolin-1-ylamino)-6-phenylpyridazin-3(2H)-one; 5-acetyl-4-[(2-butylquinazolin-4-yl)amino]-2-ethyl-6-phenylpyridazin-3(2H)-one; 5-acetyl-4-(1,2-benzisothiazol-3-ylamino)-2-ethyl-6-phenylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-6-phenyl-4-(pyridin-4-ylamino)pyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-[(2-hydroxy-7h-purin-6-yl)amino]-6-phenylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-6-phenyl-4-(quinazolin-4-ylamino)pyridazin-3(2H)-one; 5-acetyl-4-[(4-chloro-1H-indazol-3-yl)amino]-2-ethyl-6-phenylpyridazin-3(2H)-one; 5-acetyl-4-[(7-chloroquinolin-4-yl)amino]-2-ethyl-6-phenylpyridazin-3(2H)-one; 5-acetyl-4-[(4,6-dichloropyrimidin-2-yl)amino]-2-ethyl-6-phenylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-[(6-hydroxy-2H-pyrazolo[3,4-d]pyrimidin-4-yl)amino]-6phenylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-[(2-methylquinolin-4-yl)amino]-6-phenylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-(1H-imidazol-2-ylamino)-6-phenylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-6-phenyl-4-(quinolin-4-ylamino)pyridazin-3(2H)-one; 5-acetyl-4-(cinnolin-4-ylamino)-2-ethyl-6-phenylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-6-phenyl-4-(1H-pyrazolo[3,4-d]pyrimidin-4-ylamino)pyridazin-3(2H)-one; 5-acetyl-2-ethyl-6-phenyl-4-(thieno[2,3-d]pyrimidin-4-ylamino)pyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-(1H-indazol-6-ylamino)-6-phenylpyridazin-3(2H)-one; 5-acetyl-4-[(3-chlorophenyl)amino]-2-ethyl-6-(2-methoxypyridin-4-yl)pyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-{[4-(hydroxymethyl)phenyl]amino}-6-(6-methoxypyridin-3-

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yl)pyridazin-3(2H)-one;

5-acetyl-2-ethyl-4-[(3-methoxyphenyl)amino]-6-thien-3-ylpyridazin-3(2H)-one;

5-acetyl-6-(1-benzofuran-5-yl)-2-ethyl-4-[(3-fluorophenyl)amino]pyridazin-3(2H)-one;

1-ethyl-5-[(3-methoxyphenyl)amino]-n,n-dimethyl-6-oxo-3-pyridin-3-yl-1,6-

dihydropyridazine-4-carboxamide;

5-[(3-chlorophenyl)amino]-1-ethyl-n-methyl-6-oxo-3-pyridin-4-yl-1,6-

dihydropyridazine-4-carboxamide;

2-ethyl-4-[(3-fluorophenyl)amino]-5-glycoloyl-6-pyridin-4-ylpyridazin-3(2H)-one;

2-ethyl-4-[(3-fluorophenyl)amino]-5-(methoxyacetyl)-6-pyridin-3-ylpyridazin-

3(2H)-one;

5-[(dimethylamino)acetyl]-2-ethyl-4-[(3-methoxyphenyl)amino]-6-pyridin-3-

ylpyridazin-3(2H)-one;

2-ethyl-4-[(3-fluorophenyl)amino]-5-[(methylamino)acetyl]-6-pyridin-4-ylpyridazin-

3(2H)-one;

 $3-\{[2-ethyl-3-oxo-5-(3-phenylpropanoyl)-6-pyridin-4-yl-2, 3-dihydropyridazin-4-yl-2, 3-dihydropyrida$

yl]amino}benzamide;

ethyl 4-acetyl-5-[(3-chlorophenyl)amino]-1-ethyl-6-oxo-1,6-dihydropyridazine-3-

carboxylate;

ethyl 4-acetyl-5-amino-1-ethyl-6-oxo-1,6-dihydropyridazine-3-carboxylate;

5-acetyl-6-(1,3-benzoxazol-2-yl)-2-ethyl-4-[(3-methoxyphenyl)amino]pyridazin-

3(2H)-one;

5-acetyl-6-(1,3-benzoxazol-2-yl)-2-ethyl-4-{[4-

(hydroxymethyl)phenyl]amino}pyridazin-3(2H)-one;

5-acetyl-2-ethyl-4-(isoquinolin-4-ylamino)-6-phenylpyridazin-3(2H)-one;

5-acetyl-2-ethyl-4-(1,6-naphthyridin-8-ylamino)-6-phenylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-[(5-methoxypyridin-3-yl)amino]-6-phenylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-6-pyridin-4-yl-4-(pyridin-3-ylamino)pyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-[(4-methylpyridin-3-yl)amino]-6-pyridin-4-ylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-(isoquinolin-4-ylamino)-6-pyridin-4-ylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-6-pyridin-4-yl-4-[(3,4,5-trifluorophenyl)amino]pyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-[(4-methylpyridin-3-yl)amino]-6-pyridin-3-ylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-(isoquinolin-4-ylamino)-6-pyridin-3-ylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-6-pyridin-3-yl-4-[(3,4,5-trifluorophenyl)amino]pyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-(quinolin-5-ylamino)-6-thien-2-ylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-(pyridin-3-ylamino)-6-thien-2-ylpyridazin-3(2H)-one; 4-[(5-acetyl-2-ethyl-3-oxo-6-thien-2-yl-2,3-dihydropyridazin-4-yl)amino]benzonitrile; 5-acetyl-2-ethyl-6-thien-2-yl-4-[(3,4,5-trifluorophenyl)amino]pyridazin-3(2H)-one; 5-Acetyl-4-(bis (4-cyanophenyl)amino)- 2-ethyl-6-thien-2-ylpyridazin-3(2H)-one; 5-acetyl-2-(cyclopropylmethyl)-4-(quinolin-5-ylamino)-6-thien-2-ylpyridazin-3(2H)-one; 5-acetyl-2-(cyclopropylmethyl)-4-(pyridin-3-ylamino)-6-thien-2-ylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-(quinolin-5-ylamino)-6-thien-3-ylpyridazin-3(2H)-one; 5-acetyl-4-[(3-chlorophenyl)amino]-2-ethyl-6-thien-3-ylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-(pyridin-3-ylamino)-6-thien-3-ylpyridazin-3(2H)-one; 4-[(5-acetyl-2-ethyl-3-oxo-6-thien-3-yl-2,3-dihydropyridazin-4-yl)amino]benzonitrile; 5-acetyl-2-ethyl-6-thien-3-yl-4-[(3,4,5-trifluorophenyl)amino]pyridazin-3(2H)-one; 2-ethyl-6-phenyl-5-(3-phenylpropanoyl)-4-(quinolin-5-ylamino)pyridazin-3(2H)-one;

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2-ethyl-6-phenyl-5-(3-phenylpropanoyl)-4-(pyridin-3-ylamino)pyridazin-3(2H)-one;
2-ethyl-4-(isoquinolin-4-ylamino)-6-phenyl-5-(3-phenylpropanoyl)pyridazin-
3(2H)-one;
2-ethyl-6-phenyl-4-(quinolin-5-ylamino)-5-(3-thien-3-ylpropanoyl)pyridazin-
3(2H)-one;
2-ethyl-6-phenyl-4-(pyridin-3-ylamino)-5-(3-thien-3-ylpropanoyl)pyridazin-3(2H)-one;
5-acetyl-4-[(3-chlorophenyl)amino]-2-ethyl-6-(1H-imidazo[4,5-b]pyridin-2-
yl)pyridazin-3(2H)-one;
5-acetyl-6-(1,3-benzothiazol-2-yl)-4-[(3-chlorophenyl)amino]-2-ethylpyridazin-
3(2H)-one;
5-acetyl-6-(1-benzofuran-2-yl)-4-[(3-chlorophenyl)amino]-2-ethylpyridazin-3(2H)-one;
5-acetyl-2-ethyl-6-pyridin-3-yl-4-(pyridin-3-ylamino)pyridazin-3(2H)-one;
4-[(5-acetyl-2-ethyl-3-oxo-6-pyridin-3-yl-2,3-dihydropyridazin-4-yl)amino]benzoic
acid:
5-acetyl-2-ethyl-4-[(1-oxidopyridin-3-yl)amino]-6-phenylpyridazin-3(2H)-one;
ethyl 3-(5-acetyl-2-ethyl-3-oxo-6-pyridin-4-yl-2,3-dihydro-pyridazin-4-
vlamino)benzoate:
3-[(5-acetyl-2-ethyl-3-oxo-6-pyridin-4-yl-2,3-dihydropyridazin-4-yl)amino]benzamide;
5-acetyl-2-ethyl-6-phenyl-4-(thieno[2,3-b]pyridin-3-ylamino)pyridazin-3(2H)-one;
5-acetyl-2-ethyl-4-[(6-fluoropyridin-3-yl)amino]-6-phenylpyridazin-3(2H)-one;
5-acetyl-2-ethyl-4-[(2-methylpyridin-3-yl)amino]-6-phenylpyridazin-3(2H)-one;
5-acetyl-4-{[2-(dimethylamino)pyridin-3-yl]amino}-2-ethyl-6-phenylpyridazin-
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3(2H)-one;

5-[(5-acetyl-2-ethyl-3-oxo-6-phenyl-2,3-dihydropyridazin-4-yl)amino]pyridine-2-carboxylic acid;

5-acetyl-2-ethyl-4-[(2-methoxypyridin-3-yl)amino]-6-phenylpyridazin-3(2H)-one;
5-acetyl-2-ethyl-4-(1H-indazol-4-ylamino)-6-phenylpyridazin-3(2H)-one;
5-acetyl-4-[(2-chloropyridin-3-yl)amino]-2-ethyl-6-phenylpyridazin-3(2H)-one;
5-acetyl-4-[(5-chloropyridin-3-yl)amino]-2-ethyl-6-phenylpyridazin-3(2H)-one;
5-[(5-acetyl-2-ethyl-3-oxo-6-phenyl-2,3-dihydropyridazin-4-yl)amino]nicotinamide;
5-acetyl-2-ethyl-4-(1,7-naphthyridin-8-ylamino)-6-phenylpyridazin-3(2H)-one;
2-ethyl-5-glycoloyl-4-[(2-methylpyridin-3-yl)amino]-6-phenylpyridazin-3(2H)-one;
methyl 5-[(5-acetyl-2-ethyl-3-oxo-6-phenyl-2,3-dihydropyridazin-4-

5-[(5-acetyl-2-ethyl-3-oxo-6-phenyl-2,3-dihydropyridazin-4-yl)amino]nicotinic acid; 5-acetyl-2-ethyl-4-(1,5-naphthyridin-3-ylamino)-6-phenylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-[(8-hydroxy-1,7-naphthyridin-5-yl)amino]-6-phenylpyridazin-3(2H)-one;

yl)amino]nicotinate;

5-acetyl-2-ethyl-6-phenyl-4-(thien-2-ylamino)pyridazin-3(2H)-one;
5-acetyl-2-ethyl-6-phenyl-4-[(2-phenylpyridin-3-yl)amino]pyridazin-3(2H)-one;
ethyl {5-[(5-acetyl-2-ethyl-3-oxo-6-phenyl-2,3-dihydropyridazin-4-yl)amino]pyridin-2-yl}acetate;

5-acetyl-2-ethyl-4-[(6-methylpyridin-3-yl)amino]-6-phenylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-[(6-hydroxypyridin-3-yl)amino]-6-phenylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-[(2-fluoropyridin-3-yl)amino]-6-phenylpyridazin-3(2H)-one; 5-acetyl-4-[(6-chloro-4-methylpyridin-3-yl)amino]-2-ethyl-6-phenylpyridazin-3(2H)-one;

5-acetyl-2-ethyl-4-[(3-hydroxypyridin-2-yl)amino]-6-phenylpyridazin-3(2H)-one;

5-acetyl-2-ethyl-4-[(4-methoxypyridin-3-yl)amino]-6-phenylpyridazin-3(2H)-one;

5-acetyl-2-ethyl-4-(isoquinolin-8-ylamino)-6-phenylpyridazin-3(2H)-one;

5-acetyl-2-ethyl-6-phenyl-4-(quinolin-7-ylamino)pyridazin-3(2H)-one;

5-acetyl-4-[(5-chloropyridin-3-yl)amino]-2-ethyl-6-(3-fluorophenyl)pyridazin-

3(2H)-one;

5-acetyl-2-ethyl-6-(4-fluorophenyl)-4-[(2-methoxypyridin-3-yl)amino]pyridazin-

3(2H)-one;

5-acetyl-2-ethyl-6-(4-fluorophenyl)-4-[(2-methylpyridin-3-yl)amino]pyridazin-

3(2H)-one;

5-acetyl-4-[(2-chloropyridin-3-yl)amino]-2-ethyl-6-(4-fluorophenyl)pyridazin-

3(2H)-one;

5-acetyl-2-ethyl-6-(4-fluorophenyl)-4-[(4-methylpyridin-3-yl)amino]pyridazin-

3(2H)-one;

5-acetyl-2-ethyl-6-(4-fluorophenyl)-4-[(2-fluoropyridin-3-yl)amino]pyridazin-

3(2H)-one;

5-acetyl-4-[(2-chloropyridin-3-yl)amino]-2-(cyclopropylmethyl)-6-(4-

fluorophenyl)pyridazin-3(2H)-one;

5-acetyl-2-(cyclopropylmethyl)-6-(4-fluorophenyl)-4-[(2-methoxypyridin-3-

yl)amino]pyridazin-3(2H)-one;

5-acetyl-2-(cyclopropylmethyl)-6-(4-fluorophenyl)-4-[(2-methylpyridin-3-

yl)amino]pyridazin-3(2H)-one;

5-acetyl-2-(cyclopropylmethyl)-6-(4-fluorophenyl)-4-[(2-fluoropyridin-3-

yl)amino]pyridazin-3(2H)-one;

5-acetyl-2-(cyclopropylmethyl)-6-(4-fluorophenyl)-4-[(4-methylpyridin-3-

yl)amino]pyridazin-3(2H)-one;

5-acetyl-2-(cyclopropylmethyl)-6-(4-fluorophenyl)-4-[(pyridin-3-yl)amino]pyridazin-

3(2H)-one;

5-acetyl-6-(3-chlorophenyl)-2-ethyl-4-[(2-methylpyridin-3-yl)amino]pyridazin-

3(2H)-one;

5-acetyl-6-(3-chlorophenyl)-4-[(2-chloropyridin-3-yl)amino]-2-ethylpyridazin-

3(2H)-one;

5-acetyl-6-(3-chlorophenyl)-2-ethyl-4-[(4-methylpyridin-3-yl)amino]pyridazin-

3(2H)-one;

methyl 5-[(5-acetyl-2-ethyl-3-oxo-6-phenyl-2,3-dihydropyridazin-4-

yl)amino]quinoline-8-carboxylate;

5-acetyl-2-ethyl-4-[(4-methylpyridin-3-yl)amino]-6-phenylpyridazin-3(2H)-one;

5-acetyl-2-ethyl-4-(isoquinolin-4-ylamino)-6-(4-methoxyphenyl)pyridazin-3(2H)-one;

5-acetyl-2-ethyl-6-(4-methoxyphenyl)-4-(pyridin-3-ylamino)pyridazin-3(2H)-one;

5-acetyl-2-ethyl-6-(4-methoxyphenyl)-4-(quinolin-5-ylamino)pyridazin-3(2H)-one;

5-acetyl-2-ethyl-6-(4-methoxy-phenyl)-4-(1-oxy-quinolin-5-ylamino)-2H-pyridazin-3-

one

5-acetyl-2-ethyl-4-(isoguinolin-4-ylamino)-6-(3-methoxyphenyl)pyridazin-3(2H)-one;

5-acetyl-2-ethyl-6-(3-methoxyphenyl)-4-(pyridin-3-ylamino)pyridazin-3(2H)-one; 5-acetyl-2-ethyl-6-(3-methoxyphenyl)-4-(quinolin-5-ylamino)pyridazin-3(2H)-one; 5-acetyl-2-ethyl-6-(3-methoxyphenyl)-4-[(1-oxidoquinolin-5-yl)amino]pyridazin-3(2H)-one;

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5-acetyl-2-ethyl-4-(isoquinolin-4-ylamino)-6-(4-methylphenyl)pyridazin-3(2H)-one; 5-acetyl-2-ethyl-6-(4-methylphenyl)-4-(pyridin-3-ylamino)pyridazin-3(2H)-one; 5-acetyl-2-ethyl-6-(4-methylphenyl)-4-(quinolin-5-ylamino)pyridazin-3(2H)-one; 5-acetyl-2-ethyl-6-(4-methylphenyl)-4-[(1-oxidoquinolin-5-yl)amino]pyridazin-3(2H)-one;

5-acetyl-2-ethyl-6-(4-methylphenyl)-4-[(4-methylpyridin-3-yl)amino]pyridazin-3(2H)-one;

5-acetyl-2-ethyl-4-(isoquinolin-4-ylamino)-6-(3-methylphenyl)pyridazin-3(2H)-one; 5-acetyl-2-ethyl-6-(3-methylphenyl)-4-(pyridin-3-ylamino)pyridazin-3(2H)-one; 5-acetyl-2-ethyl-6-(3-methylphenyl)-4-(quinolin-5-ylamino)pyridazin-3(2H)-one; 5-acetyl-2-ethyl-6-(3-methylphenyl)-4-[(4-methylpyridin-3-yl)amino]pyridazin-3(2H)-one;

methyl 4-[4-acetyl-1-ethyl-5-(isoquinolin-4-ylamino)-6-oxo-1,6-dihydropyridazin-3-yl]benzoate;

methyl 4-[4-acetyl-1-ethyl-6-oxo-5-(pyridin-3-ylamino)-1,6-dihydropyridazin-3-yl]benzoate;

4-[4-acetyl-1-ethyl-6-oxo-5-(pyridin-3-ylamino)-1,6-dihydropyridazin-3-yl]benzoic acid;

methyl 4-{4-acetyl-1-ethyl-5-[(4-methylpyridin-3-yl)amino]-6-oxo-1,6-dihydropyridazin-3-yl}benzoate;

4-{4-acetyl-1-ethyl-5-[(4-methylpyridin-3-yl)amino]-6-oxo-1,6-dihydropyridazin-3-yl}benzoic acid;

methyl 3-[4-acetyl-1-ethyl-6-oxo-5-(pyridin-3-ylamino)-1,6-dihydropyridazin-3-yl]benzoate;

3-[4-acetyl-1-ethyl-6-oxo-5-(pyridin-3-ylamino)-1,6-dihydropyridazin-3-yl]benzoic acid;

5-acetyl-4-[(3-chloro-4-fluorophenyl)amino]-2-ethyl-6-pyridin-4-ylpyridazin-3(2H)-one;

5-acetyl-4-[bis(3-chloro-4-fluorophenyl)amino]-2-ethyl-6-pyridin-4-ylpyridazin-3(2H)-one;

5-acetyl-4-[(3-chloro-4-fluorophenyl)amino]-2-ethyl-6-pyridin-3-ylpyridazin-3(2H)-one;

5-acetyl-4-[bis(3-chloro-4-fluorophenyl)amino]-2-ethyl-6-pyridin-3-ylpyridazin-3(2H)-one;

methyl [4-acetyl-6-oxo-3-phenyl-5-(quinolin-5-ylamino)pyridazin-1(6H)-yl]acetate; [4-acetyl-6-oxo-3-phenyl-5-(quinolin-5-ylamino)pyridazin-1(6H)-yl]acetic acid; 5-acetyl-2-ethyl-4-[(3-methylpyridin-2-yl)amino]-6-phenylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-6-phenyl-4-(1H-pyrazol-3-ylamino)pyridazin-3(2H)-one; 5-acetyl-2-ethyl-6-phenyl-4-(9H-purin-6-ylamino)pyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-[(3-methylisoxazol-5-yl)amino]-6-phenylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-[(8-hydroxyquinolin-5-yl)amino]-6-phenylpyridazin-3(2H)-one;

5-acetyl-2-ethyl-4-(1H-indazol-7-ylamino)-6-phenylpyridazin-3(2H)-one; 5-acetyl-4-[(6-bromoguinolin-8-yl)amino]-2-ethyl-6-phenylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-[(5-methylisoxazol-3-yl)amino]-6-phenylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-(isoxazol-3-ylamino)-6-phenylpyridazin-3(2H)-one; 5-acetyl-2-(cyclopropylmethyl)-6-phenyl-4-(quinolin-5-ylamino)pyridazin-3(2H)-one; 5-acetyl-2-(cyclopropylmethyl)-6-phenyl-4-(quinolin-8-ylamino)pyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-[(1-methyl-1H-pyrazol-3-yl)amino]-6-phenylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-[(1-oxidoquinolin-5-yl)amino]-6-phenylpyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-[(2-oxidoisoquinolin-5-yl)amino]-6-phenylpyridazin-3(2H)-one; 5-acetyl-6-(3-chlorophenyl)-2-ethyl-4-(quinolin-5-ylamino)pyridazin-3(2H)-one; 5-acetyl-6-(3-chlorophenyl)-2-ethyl-4-(quinolin-8-ylamino)pyridazin-3(2H)-one; 5-acetyl-2-ethyl-6-pyridin-4-yl-4-(quinolin-5-ylamino)pyridazin-3(2H)-one; 5-acetyl-2-ethyl-6-pyridin-3-yl-4-(quinolin-5-ylamino)pyridazin-3(2H)-one; 5-acetyl-2-ethyl-4-[(8-fluoroquinolin-5-yl)amino]-6-phenylpyridazin-3(2H)-one; 5-acetyl-2-(cyclopropylmethyl)-6-(4-fluorophenyl)-4-(quinolin-8-ylamino)pyridazin-3(2H)-one;

5-acetyl-2-ethyl-6-(4-fluorophenyl)-4-(quinolin-5-ylamino)pyridazin-3(2H)-one; 5-acetyl-2-ethyl-6-(4-fluorophenyl)-4-(quinolin-8-ylamino)pyridazin-3(2H)-one; 5-acetyl-2-(cyclopropylmethyl)-6-(4-fluorophenyl)-4-(quinolin-5-ylamino)pyridazin-3(2H)-one;

5-acetyl-6-(3-chlorophenyl)-2-ethyl-4-[(1-oxidoquinolin-5-yl)amino]pyridazin-3(2H)-one;

5-acetyl-2-ethyl-4-[(2-methylquinolin-5-yl)amino]-6-phenylpyridazin-3(2H)-one;

5-acetyl-6-(3-chlorophenyl)-2-ethyl-4-(isoquinolin-5-ylamino)pyridazin-3(2H)-one; 5-acetyl-2-ethyl-6-(4-fluorophenyl)-4-[(1-oxidoquinolin-5-yl)amino]pyridazin-3(2H)-one;

. .

5-acetyl-2-ethyl-6-(3-fluorophenyl)-4-(quinolin-5-ylamino)pyridazin-3(2H)-one; 5-acetyl-2-ethyl-6-(3-fluorophenyl)-4-[(1-oxidoquinolin-5-yl)amino]pyridazin-3(2H)-one; and

5-[(5-acetyl-2-ethyl-3-oxo-6-phenyl-2,3-dihydropyridazin-4-yl)amino]quinoline-8-carboxylic acidand pharmaceutically acceptable salts thereof.

- 18. (Previously Presented) A compound as claimed in claim 17, chosen from: 5-Acetyl-2-ethyl-4-[(3-fluorophenyl)amino]-6-pyridin-3-ylpyridazin-3(2H)-one; 5-Acetyl-2-ethyl-4-(1-naphthylamino)-6-pyridin-3-ylpyridazin-3(2H)-one; 5-Acetyl-4-[(3-chlorophenyl)amino]-2-ethyl-6-pyridin-4-ylpyridazin-3(2H)-one;
 - 5-Acetyl-4-[(5-chloropherryr)amino]-2-ethyl-6-pyridin-4-yipyrida2in 6(211) 6116,
 - 5-Acetyl-2-ethyl-4-(1-naphthylamino)-6-pyridin-4-ylpyridazin-3(2H)-one;
 - 5-Acetyl-2-ethyl-4-[(2-methylphenyl)amino]-6-pyridin-4-ylpyridazin-3(2H)-one;
 - 5-Acetyl-2-ethyl-4-[(3-methoxyphenyl)amino]-6-pyridin-4-ylpyridazin-3(2H)-one;
 - 4-[(5-Acetyl-2-ethyl-3-oxo-6-pyridin-4-yl-2,3-dihydropyridazin-4-yl)amino]benzoic acid:
 - 5-Acetyl-4-[(3-chlorophenyl)amino]-2-(2-hydroxyethyl)-6-pyridin-4-ylpyridazin-3(2H)-one;
 - 5-Acetyl-4-[(3-chlorophenyl)amino]-2-ethyl-6-thien-2-ylpyridazin-3(2H)-one;
 - 5-Acetyl-2-ethyl-6-phenyl-4-(pyridin-3-ylamino)pyridazin-3(2H)-one;
 - 5-Acetyl-2-ethyl-6-phenyl-4-(quinolin-8-ylamino)pyridazin-3(2H)-one;

- 5-Acetyl-2-ethyl-4-(1H-indol-4-ylamino)-6-phenylpyridazin-3(2H)-one;
- 5-Acetyl-2-ethyl-6-phenyl-4-(quinolin-5-ylamino)pyridazin-3(2H)-one;
- 5-Acetyl-6-(3-fluorophenyl)-2-isopropyl-4-(pyridin-3-ylamino)pyridazin-3(2H)-one;
- 5-Acetyl-2-(cyclopropylmethyl)-6-(3-fluorophenyl)-4-(pyridin-3-ylamino)pyridazin-3(2H)-one;
- 5-Acetyl-2-ethyl-6-(4-fluorophenyl)-4-(pyridin-3-ylamino)pyridazin-3(2H)-one;
- 5-Acetyl-2-ethyl-4-(isoquinolin-5-ylamino)-6-phenylpyridazin-3(2H)-one;
- 5-Acetyl-6-(1,3-benzoxazol-2-yl)-2-ethyl-4-[(3-fluorophenyl)amino]pyridazin-3(2H)-one;
- 5-Acetyl-2-ethyl-4-[(1-oxidoquinolin-5-yl)amino]-6-phenylpyridazin-3(2H)-one;
- 5-Acetyl-2-ethyl-4-(isoquinolin-4-ylamino)-6-phenylpyridazin-3(2H)-one;
- 2-Ethyl-6-phenyl-5-(3-phenylpropanoyl)-4-(pyridin-3-ylamino)pyridazin-3(2H)-one;
- 5-Acetyl-2-ethyl-4-(isoquinolin-4-ylamino)-6-(3-methylphenyl)pyridazin-3(2H)-one;
- 5-Acetyl-2-ethyl-4-(isoquinolin-4-ylamino)-6-pyridin-4-ylpyridazin-3(2H)-one;
- 5-Acetyl-2-ethyl-4-(isoquinolin-4-ylamino)-6-(4-methylphenyl)pyridazin-3(2H)-one;
- 5-Acetyl-2-ethyl-6-(4-fluorophenyl)-4-[(4-methylpyridin-3-yl)amino]pyridazin-3(2H)-one;
- 5-[(5-Acetyl-2-ethyl-3-oxo-6-phenyl-2,3-dihydropyridazin-4-yl)amino]quinoline-8-carboxylic acid;
- 5-Acetyl-2-ethyl-4-[(4-methylpyridin-3-yl)amino]-6-phenylpyridazin-3(2H)-one; Methyl 3-[4-acetyl-1-ethyl-6-oxo-5-(pyridin-3-ylamino)-1,6-dihydropyridazin-3-yl]benzoate;

5-acetyl-2-ethyl-6-(3-methylphenyl)-4-[(4-methylpyridin-3-yl)amino]pyridazin-3(2H)-one;

- 5-Acetyl-2-ethyl-4-(pyridin-3-ylamino)-6-thien-3-ylpyridazin-3(2H)-one;
- 5-Acetyl-2-ethyl-4-[(2-methylpyridin-3-yl)amino]-6-phenylpyridazin-3(2H)-one;
- 3-(4-Acetyl-5-amino-1-ethyl-6-oxo-1,6-dihydro-pyridazin-3-yl)-benzoic acid methyl ester;
- 5-Acetyl-2-ethyl-6-(3-methylphenyl)-4-(pyridin-3-ylamino)pyridazin-3(2H)-one;
- 5-Acetyl-2-ethyl-6-(3-fluorophenyl)-4-(pyridin-3-ylamino)-pyridazin-3(2H)-one;
- 5-Acetyl-2-ethyl-4-[(4-methylpyridin-3-yl)amino]-6-pyridin-4-ylpyridazin-3(2H)-one;
- 5-Acetyl-2-ethyl-4-[(4-methylpyridin-3-yl)amino]-6-pyridin-3-ylpyridazin-3(2H)-one;
- 5-Acetyl-4-[(2-chloropyridin-3-yl)amino]-2-ethyl-6-phenylpyridazin-3(2H)-one;
- 5-Acetyl-2-ethyl-6-pyridin-3-yl-4-(pyridin-3-ylamino)pyridazin-3(2H)-one;
- 5-Acetyl-2-ethyl-6-(4-methylphenyl)-4-[(4-methylpyridin-3-yl)amino]pyridazin-
- 3(2H)-one; and
- 5-Acetyl-2-ethyl-6-phenyl-4-(thieno[2,3-b]pyridin-3-ylamino)pyridazin-3(2H)-one.
- 19. (Previously Presented) A process for the preparation of a compound of formula (XXIV):

wherein

R¹ and R² represent independently from each other:

- a hydrogen atom;
- a group chosen from acyl, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, monoalkylcarbamoyl and dialkylcarbamoyl;
- an alkyl, alkenyl or alkynyl group, wherein said alkyl, alkenyl or alkynyl group is
 optionally substituted by one or more substituents chosen from halogen atoms,
 hydroxy, alkoxy, aryloxy, alkylthio, oxo, amino, mono- and di-alkylamino, acylamino,
 carbamoyl and mono- and di-alkylcarbamoyl groups;
- an aryl or heteroaryl group, wherein said aryl or heteroaryl group is optionally substituted by one or more substituents chosen from halogen atoms, hydroxy, hydroxyalkyl, hydroxycarbonyl, alkoxy, alkylenedioxy, alkoxyacyl, aryloxy, acyl, acyloxy, alkylthio, amino, nitro, cyano, mono- and di-alkylamino, acylamino, carbamoyl, mono- and di-alkylcarbamoyl, difluoromethyl, trifluoromethyl, difluoromethoxy and trifluoromethoxy groups;

- a saturated or unsaturated heterocyclic group, which is optionally substituted by one
 or more substituents chosen from halogen atoms, hydroxy, hydroxyalkyl,
 hydroxycarbonyl, alkoxy, alkylenedioxy, alkoxyacyl, aryloxy, acyl, acyloxy, alkylthio,
 oxo, amino, nitro, cyano, mono- and di-alkylamino, acylamino, carbamoyl, monoand di-alkylcarbamoyl, difluoromethyl, trifluoromethyl, difluoromethoxy and
 trifluoromethoxy groups;
- a group of formula

$$-(CH_2)_n-R^6$$

wherein n is an integer from 0 to 4 and R⁶ represents:

- a cycloalkyl or cycloalkenyl group;
- an aryl group, which is optionally substituted by one or more substituents
 chosen from halogen atoms, alkyl, hydroxy, alkoxy, alkylenedioxy, alkylthio,
 amino, mono- and di-alkylamino, nitro, acyl, hydroxycarbonyl, alkoxycarbonyl,
 carbamoyl, mono- and di-alkylcarbamoyl, cyano, trifluoromethyl,
 difluoromethoxy and trifluoromethoxy groups;
- or a 3- to 7-membered ring having from 1 to 4 heteroatoms chosen from nitrogen, oxygen and sulphur, which ring is optionally substituted by one or more substituents chosen from halogen atoms, alkyl, hydroxy, alkoxy, alkylenedioxy, amino, mono- and di-alkylamino, nitro, cyano and trifluoromethyl groups;

R³ represents a monocyclic or polycyclic aryl or heteroaryl group, which is optionally substituted by one or more substituents chosen from:

- halogen atoms;
- alkyl and alkylene groups, which are optionally substituted by one or more substituents chosen from halogen atoms; phenyl, hydroxy, hydroxyalkyl, alkoxy, aryloxy, alkylthio, oxo, amino, mono- and di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, and mono- and di-alkylcarbamoyl groups;
- phenyl, hydroxy, hydroxyalkyl, alkoxy, cycloalkoxy, nitro, aryloxy, alkylthio,
 alkylsulphinyl, alkylsulphonyl, alkylsulfamoyl, acyl, amino, mono- and dialkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and
 di-alkylcarbamoyl, ureido, N'-alkylureido, N',N'-dialkylureido, alkylsulphamido,
 aminosuphonyl, mono- and di-alkylaminosulphonyl, cyano, difluoromethoxy and
 trifluoromethoxy groups; and

R⁴ represents:

- a hydrogen atom;
- a hydroxy, alkoxy, amino, mono- or di-alkylamino group;
- an alkyl, alkenyl or alkynyl group, wherein said alkyl, alkenyl or alkynyl group is
 optionally substituted by one or more substituents chosen from halogen atoms,
 hydroxy, alkoxy, aryloxy, alkylthio, oxo, amino, mono- and di-alkylamino,
 acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl and mono- and dialkylcarbamoyl groups;

• or a group of formula

wherein n and R⁶ are as defined above

wherein each G₁, G₂, G₃ and G₄ independently represents a nitrogen or carbon atom, Y represents an O atom, a S atom or an –NH- group and the benzene ring may optionally be substituted by one or more substituents, which process comprises reacting a carboxylic acid ester of formula (VII)

VII

wherein R¹, R², R³ and R⁴ are as defined above, with an ortho-subtituted aniline of formula (VIII) in the presence of a dehydrating agent,

$$G_{2} \xrightarrow{G_{1}} NH_{2}$$

$$G_{3} \xrightarrow{G_{4}} Y$$
(VIII)

wherein each G₁, G₂, G₃ and G₄ independently represent a nitrogen or carbon atom and Y represents an amino, mercapto or hydroxy group.

20. (Previously Presented) A compound of formula (XXV)

wherein M^2 is either a hydrogen atom or a group R^2 and M^3 is either a hydrogen atom or a group R^3 , and wherein

R¹ and R² represent independently from each other:

- a hydrogen atom;
- a group chosen from acyl, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, monoalkylcarbamoyl and dialkylcarbamoyl;
- an alkyl, alkenyl or alkynyl group, wherein said alkyl, alkenyl or alkynyl group is
 optionally substituted by one or more substituents chosen from halogen atoms,
 hydroxy, alkoxy, aryloxy, alkylthio, oxo, amino, mono- and di-alkylamino, acylamino,
 carbamoyl and mono- and di-alkylcarbamoyl groups;
- an aryl or heteroaryl group, wherein said aryl or heteroaryl group is optionally substituted by one or more substituents chosen from halogen atoms, hydroxy, hydroxyalkyl, hydroxycarbonyl, alkoxy, alkylenedioxy, alkoxyacyl, aryloxy, acyl, acyloxy, alkylthio, amino, nitro, cyano, mono- and di-alkylamino, acylamino,

carbamoyl, mono- and di-alkylcarbamoyl, difluoromethyl, trifluoromethyl, difluoromethoxy and trifluoromethoxy groups;

- a saturated or unsaturated heterocyclic group, which is optionally substituted by one or more substituents chosen from halogen atoms, hydroxy, hydroxyalkyl, hydroxycarbonyl, alkoxy, alkylenedioxy, alkoxyacyl, aryloxy, acyl, acyloxy, alkylthio, oxo, amino, nitro, cyano, mono- and di-alkylamino, acylamino, carbamoyl, mono- and di-alkylcarbamoyl, difluoromethyl, trifluoromethyl, difluoromethoxy and trifluoromethoxy groups;
- a group of formula

wherein n is an integer from 0 to 4 and R⁶ represents:

- a cycloalkyl or cycloalkenyl group;
- an aryl group, which is optionally substituted by one or more substituents
 chosen from halogen atoms, alkyl, hydroxy, alkoxy, alkylenedioxy, alkylthio,
 amino, mono- and di-alkylamino, nitro, acyl, hydroxycarbonyl, alkoxycarbonyl,
 carbamoyl, mono- and di-alkylcarbamoyl, cyano, trifluoromethyl,
 difluoromethoxy and trifluoromethoxy groups;
- or a 3- to 7-membered ring having from 1 to 4 heteroatoms chosen from nitrogen, oxygen and sulphur, which ring is optionally substituted by one or more substituents chosen from halogen atoms, alkyl, hydroxy, alkoxy, alkylenedioxy, amino, mono- and di-alkylamino, nitro, cyano and trifluoromethyl groups;

R³ represents a monocyclic or polycyclic aryl or heteroaryl group, which is optionally substituted by one or more substituents chosen from:

- halogen atoms;
- alkyl and alkylene groups, which are optionally substituted by one or more substituents chosen from halogen atoms; phenyl, hydroxy, hydroxyalkyl, alkoxy, aryloxy, alkylthio, oxo, amino, mono- and di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, and mono- and di-alkylcarbamoyl groups;
- phenyl, hydroxy, hydroxyalkyl, alkoxy, cycloalkoxy, nitro, aryloxy, alkylthio, alkylsulphinyl, alkylsulphonyl, alkylsulfamoyl, acyl, amino, mono- and dialkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and di-alkylcarbamoyl, ureido, N'-alkylureido, N',N'-dialkylureido, alkylsulphamido, aminosuphonyl, mono- and di-alkylaminosulphonyl, cyano, difluoromethoxy and trifluoromethoxy groups;

R⁵ represents a group –COOR⁷ or a monocyclic or polycyclic aryl or heteroaryl group,wherein said –COOR⁷ or monocyclic or polycyclic aryl or heteroaryl group is optionally substituted by one or more substituents chosen from:

- halogen atoms;
- alkyl and alkenyl groups, which are optionally substituted by one or more substituents chosen from halogen atoms, phenyl, hydroxy, hydroxyalkyl, alkoxy, aryloxy, alkylthio, oxo, amino, mono- and di-alkylamino, acylamino,

hydroxycarbonyl, alkoxycarbonyl, carbamoyl, and mono- and di-alkylcarbamoyl groups; and

phenyl, hydroxy, alkylenedioxy, alkoxy, cycloalkyloxy, alkylthio, alkylsulphinyl, alkylsulphonyl, alkylsulfamoyl, amino, mono- and di-alkylamino, acylamino, nitro, acyl, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and di-alkylcarbamoyl, ureido, N'-alkylureido, N',N'-dialkylureido, alkylsulphamido, aminosuphonyl, mono- and di-alkylaminosulphonyl, cyano, difluoromethoxy and trifluoromethoxy groups;

wherein R⁷ represents an alkyl, which is optionally substituted by one or more substituents chosen from halogen atoms, hydroxy, alkoxy, aryloxy, alkylthio, oxo, amino, mono- and di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and di-alkylcarbamoyl groups, and a group of formula

and

R⁴ represents:

- a hydrogen atom;
- a hydroxy, alkoxy, amino, mono- or di-alkylamino group;
- an alkyl, alkenyl or alkynyl group, wherein said alkyl, alkenyl or alkynyl group is
 optionally substituted by one or more substituents chosen from halogen atoms,
 hydroxy, alkoxy, aryloxy, alkylthio, oxo, amino, mono- and di-alkylamino,

acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl and mono- and dialkylcarbamoyl groups;

• or a group of formula

 $-(CH_2)_n-R^6$

wherein n and R⁶ are as defined above.

- 21. (Original) A compound according to claim 20, which is ethyl 4-acetyl-5-amino-1-ethyl-6-oxo-1,6-dihydropyridazine-3-carboxylate.
- 22. (Cancelled)
- 23. (Previously Presented) A pharmaceutical composition comprising a compound as claimed in claim 1, mixed with a pharmaceutically acceptable diluent or carrier.
- 24. (Cancelled)
- 25. (Cancelled)
- 26. (Cancelled)

- 27. (Previously Presented) A method for treating a subject afflicted with a pathological condition or disease susceptible to amelioration by inhibition of phosphodiesterase 4, which method comprises administering to the said subject an effective amount of a compound as claimed in claim 1, wherein the pathological condition or disease is chosen from asthma and atopic dermatitis
- 28. (Previously Presented) A composition comprising:
 - (i) a pyridazin-3(2H)-one derivative compound of formula (I):

wherein

R¹ and R² represent independently from each other:

- a hydrogen atom;
- a group chosen from acyl, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, monoalkylcarbamoyl and dialkylcarbamoyl;
- an alkyl, alkenyl or alkynyl group, wherein said alkyl, alkenyl or alkynyl group is
 optionally substituted by one or more substituents chosen from halogen atoms,
 hydroxy, alkoxy, aryloxy, alkylthio, oxo, amino, mono- and di-alkylamino, acylamino,
 carbamoyl and mono- and di-alkylcarbamoyl groups;

- an aryl or heteroaryl group, wherein said aryl or heteroaryl group is optionally substituted by one or more substituents chosen from halogen atoms, hydroxy, hydroxyalkyl, hydroxycarbonyl, alkoxy, alkylenedioxy, alkoxyacyl, aryloxy, acyl, acyloxy, alkylthio, amino, nitro, cyano, mono- and di-alkylamino, acylamino, carbamoyl, mono- and di-alkylcarbamoyl, difluoromethyl, trifluoromethyl, difluoromethoxy and trifluoromethoxy groups;
- a saturated or unsaturated heterocyclic group, which is optionally substituted by one
 or more substituents chosen from halogen atoms, hydroxy, hydroxyalkyl,
 hydroxycarbonyl, alkoxy, alkylenedioxy, alkoxyacyl, aryloxy, acyl, acyloxy, alkylthio,
 oxo, amino, nitro, cyano, mono- and di-alkylamino, acylamino, carbamoyl, monoand di-alkylcarbamoyl, difluoromethyl, trifluoromethyl, difluoromethoxy and
 trifluoromethoxy groups;
- a group of formula

wherein n is an integer from 0 to 4 and R⁶ represents:

- a cycloalkyl or cycloalkenyl group;
- an aryl group, which is optionally substituted by one or more substituents
 chosen from halogen atoms, alkyl, hydroxy, alkoxy, alkylenedioxy, alkylthio,
 amino, mono- and di-alkylamino, nitro, acyl, hydroxycarbonyl, alkoxycarbonyl,
 carbamoyl, mono- and di-alkylcarbamoyl, cyano, trifluoromethyl,
 difluoromethoxy and trifluoromethoxy groups;
- or a 3- to 7-membered ring having from 1 to 4 heteroatoms chosen from nitrogen, oxygen and sulphur, which ring is optionally substituted by one or

more substituents chosen from halogen atoms, alkyl, hydroxy, alkoxy, alkylenedioxy, amino, mono- and di-alkylamino, nitro, cyano and trifluoromethyl groups;

R³ represents a monocyclic or polycyclic aryl or heteroaryl group, which is optionally substituted by one or more substituents chosen from:

- halogen atoms;
- alkyl and alkylene groups, which are optionally substituted by one or more substituents chosen from halogen atoms; phenyl, hydroxy, hydroxyalkyl, alkoxy, aryloxy, alkylthio, oxo, amino, mono- and di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, and mono- and di-alkylcarbamoyl groups;
- phenyl, hydroxy, hydroxyalkyl, alkoxy, cycloalkoxy, nitro, aryloxy, alkylthio, alkylsulphinyl, alkylsulphonyl, alkylsulfamoyl, acyl, amino, mono- and dialkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and di-alkylcarbamoyl, ureido, N'-alkylureido, N',N'-dialkylureido, alkylsulphamido, aminosuphonyl, mono- and di-alkylaminosulphonyl, cyano, difluoromethoxy and trifluoromethoxy groups;

R⁵ represents a group –COOR⁷ or a monocyclic or polycyclic aryl or heteroaryl group, wherein said –COOR⁷ or monocyclic or polycyclic aryl or heteroaryl group is optionally substituted by one or more substituents chosen from:

halogen atoms;

- alkyl and alkenyl groups, which are optionally substituted by one or more substituents chosen from halogen atoms, phenyl, hydroxy, hydroxyalkyl, alkoxy, aryloxy, alkylthio, oxo, amino, mono- and di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, and mono- and di-alkylcarbamoyl groups; and
- phenyl, hydroxy, alkylenedioxy, alkoxy, cycloalkyloxy, alkylthio, alkylsulphinyl, alkylsulphonyl, alkylsulfamoyl, amino, mono- and di-alkylamino, acylamino, nitro, acyl, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and di-alkylcarbamoyl, ureido, N'-alkylureido, N',N'-dialkylureido, alkylsulphamido, aminosuphonyl, mono- and di-alkylaminosulphonyl, cyano, difluoromethoxy and trifluoromethoxy groups;

wherein R⁷ represents an alkyl, which is optionally substituted by one or more substituents chosen from halogen atoms, hydroxy, alkoxy, aryloxy, alkylthio, oxo, amino, mono- and di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and di-alkylcarbamoyl groups, and a group of formula

$$-(CH_2)_n-R^6$$

wherein n and R⁶ are as defined above; and

R⁴ represents:

- a hydrogen atom;
- a hydroxy, alkoxy, amino, mono- or di-alkylamino group;

- an alkyl, alkenyl or alkynyl group, wherein said alkyl, alkenyl or alkynyl group is
 optionally substituted by one or more substituents chosen from halogen atoms,
 hydroxy, alkoxy, aryloxy, alkylthio, oxo, amino, mono- and di-alkylamino,
 acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl and mono- and dialkylcarbamoyl groups;
- or a group of formula

$$-(CH_2)_n-R^6$$

wherein n and R⁶ are as defined above

or a N-oxide obtainable from heteroaryl radicals present in the structure when said heteroradical comprise at least one N atom or a pharmaceutically acceptable salt thereof;

with the proviso that when R⁵ is neither an optionally substituted heteroaryl group nor a group COOR⁷, R³ is an optionally substituted heteroaryl group.

and

(ii) another compound chosen from (a) steroids, (b) immunosuppressive agents, (c) T-cell receptor blockers and (d) antiinflammatory drugs.

- 29. (Previously Presented) A compound according to claim 14, wherein the phenyl and heteroaryl groups are unsubstituted or substituted by 1 or 2 substituents selected from C₁-C₄ alkoxy groups, chlorine atoms and fluorine atoms.
- 30. (Currently Amended) A method for treating a subject afflicted with a pathological condition or disease susceptible to amelioration by inhibition of phosphodiesterase 4, which method comprises administering to the said subject an effective amount of a compound as claimed in claim 1, wherein the pathological condition or disease is chosen from chronic obstructive pulmonary disease, rheumatoid arthritis, psoriasis and irritable bowel disease.